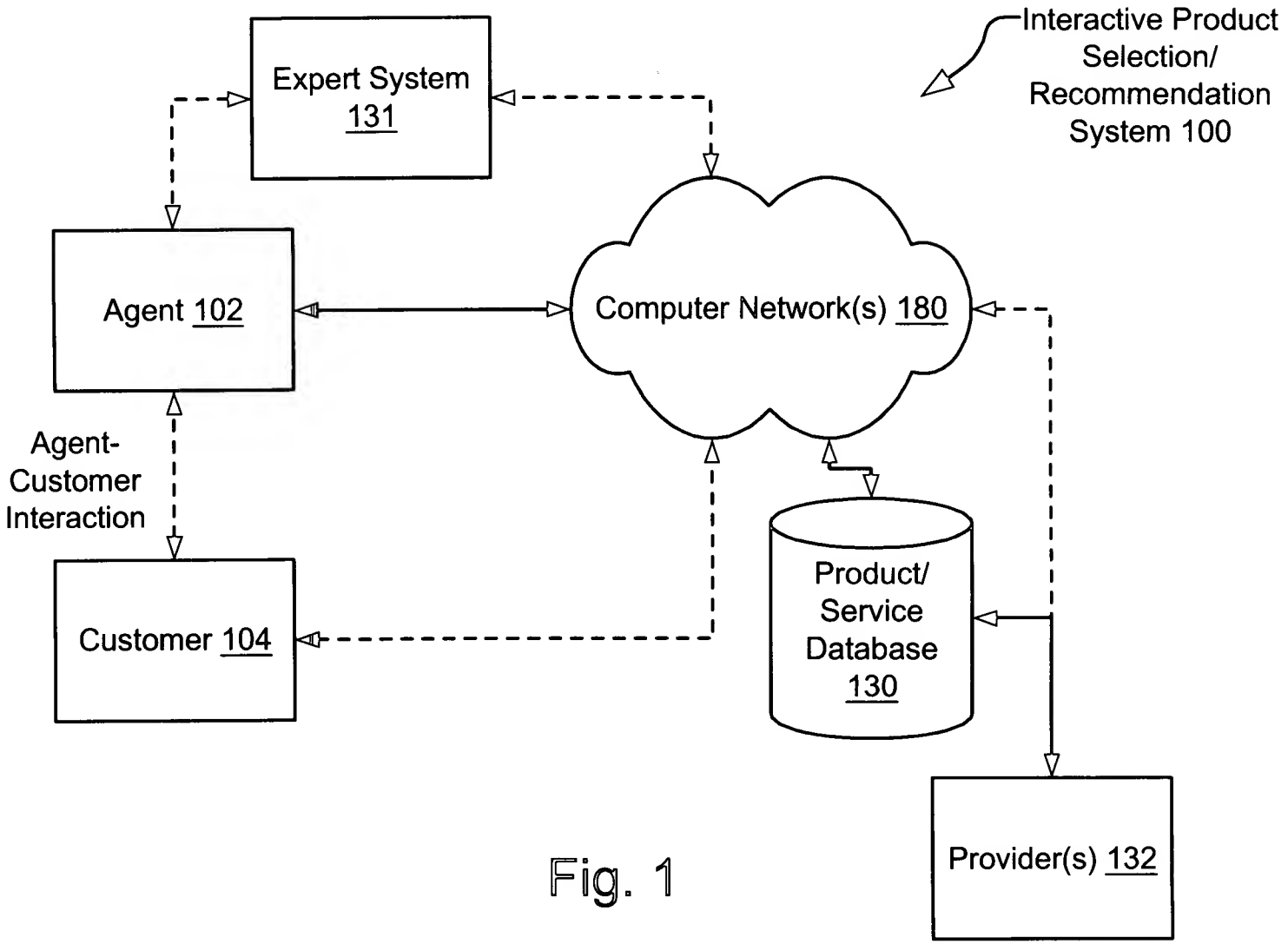
Interactive Product Selection/ Recommendation System 100
Expert System 131
Agent 102
Computer Network(s) 180
Agent-Customer Interaction
Customer 104
Product/ Service Database 130
Provider(s) 132

Fig. 1

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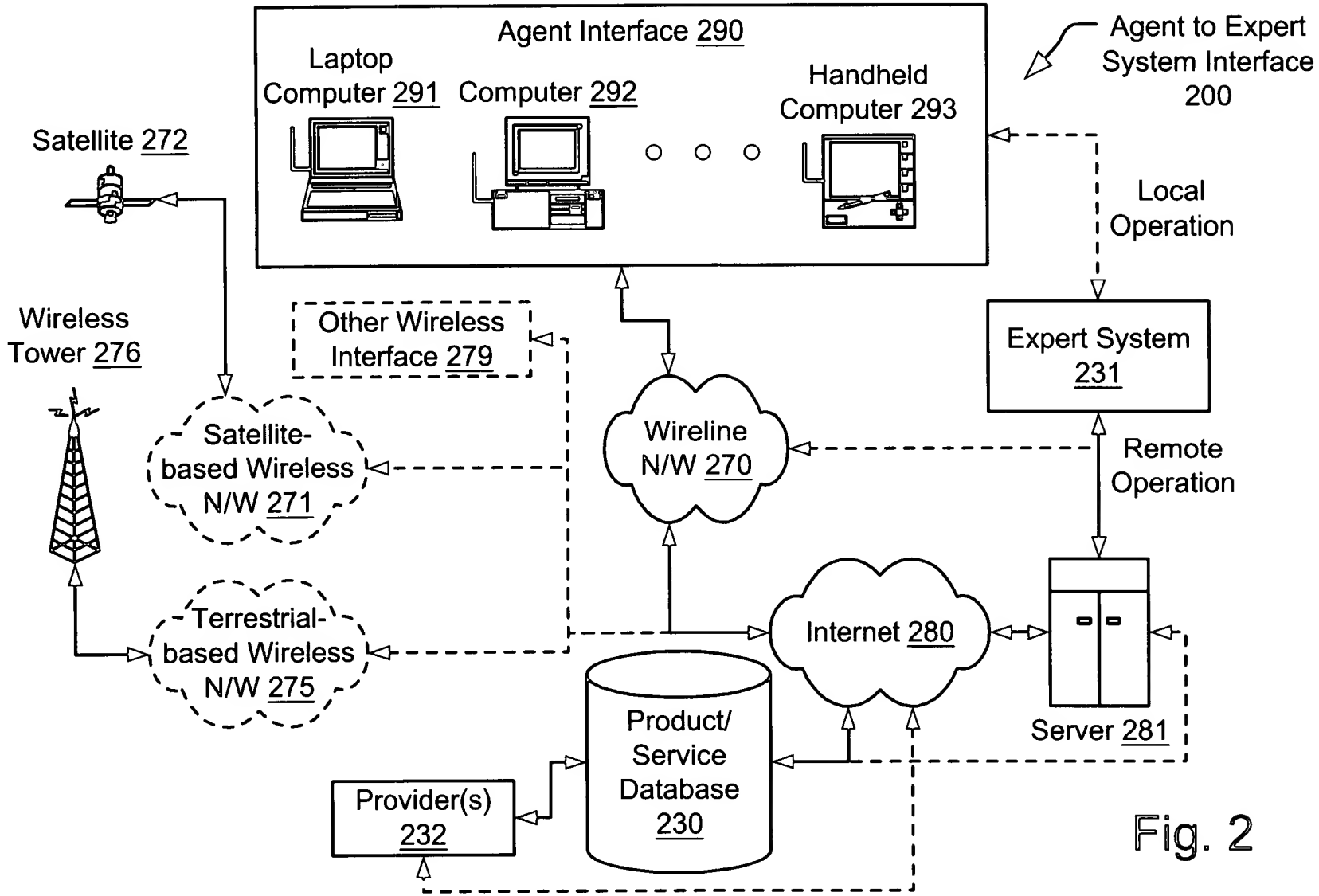
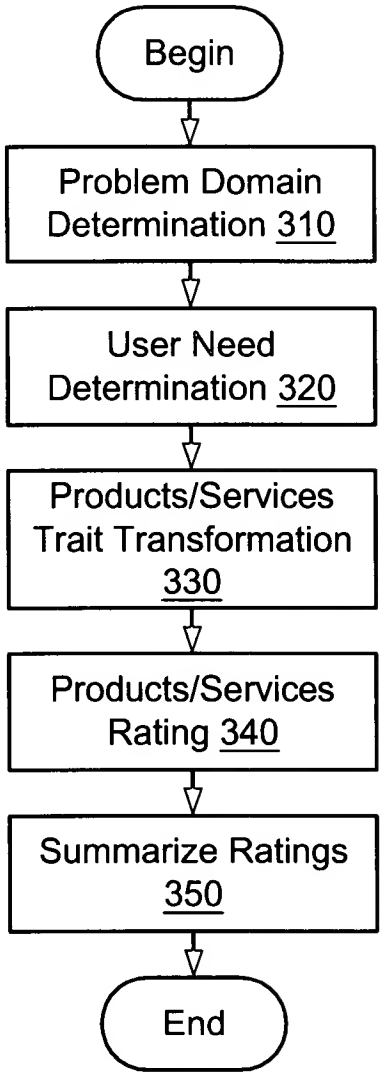
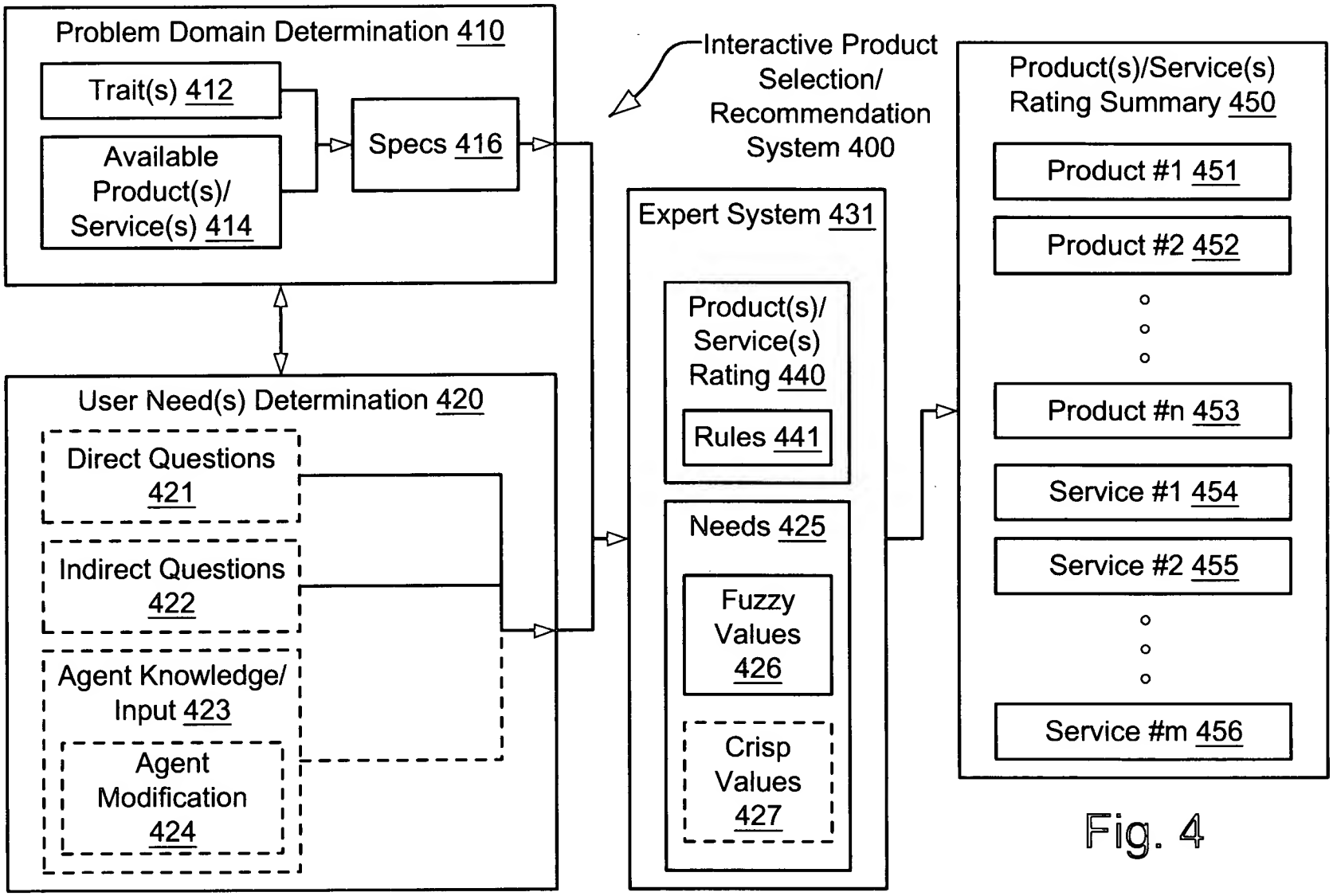


Fig. 2



Interactive Product Selection/ Recommendation Method 300

Fig. 3


Problem Domain Determination 410
Trait(s) 412
Available Product(s)/ Service(s) 414
Specs 416
Interactive Product Selection/ Recommendation System 400
Product(s)/Service(s) Rating Summary 450
Product #1 451
Product #2 452
Product #n 453
Service #1 454
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Expert System 431
Product(s)/ Service(s) Rating 440
Rules 441
Needs 425
Fuzzy Values 426
Crisp Values 427
User Need(s) Determination 420
Direct Questions 421
Indirect Questions 422
Agent Knowledge/ Input 423
Agent Modification 424

Fig. 4

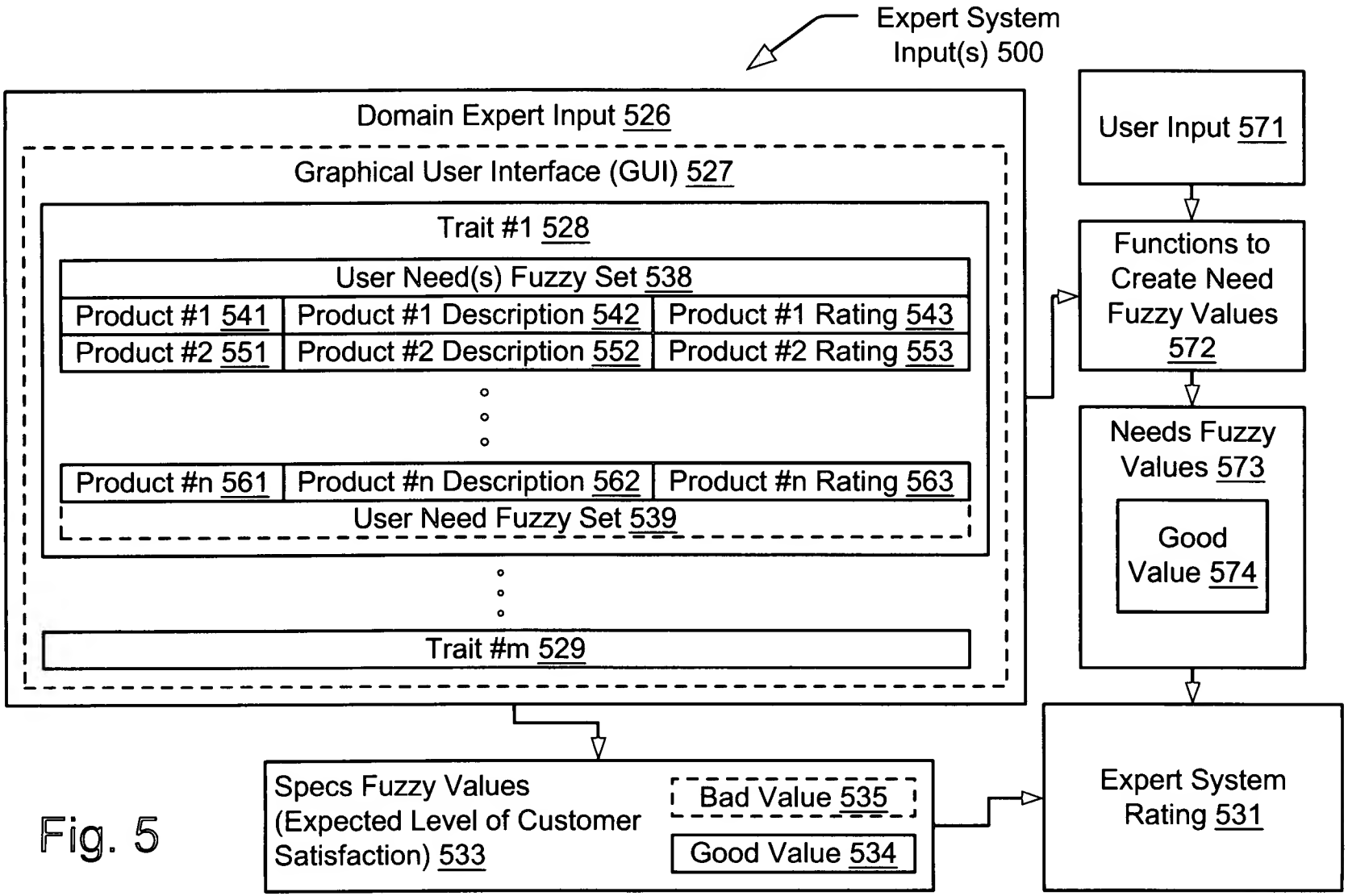
Expert System Input(s) 500
Domain Expert Input 526
Graphical User Interface (GUI) 527
Trait #1 528
User Need(s) Fuzzy Set 538
Product #1 541
Product #1 Description 542
Product #1 Rating 543
Product #2 551
Product #2 Description 552
Product #2 Rating 553
Product #n 561
Product #n Description 562
Product #n Rating 563
User Need Fuzzy Set 539
Trait #m 529
User Input 571
Functions to Create Need Fuzzy Values 572
Needs Fuzzy Values 573
Good Value 574
Specs Fuzzy Values (Expected Level of Customer Satisfaction) 533
Bad Value 535
Good Value 534
Expert System Rating 531

Fig. 5

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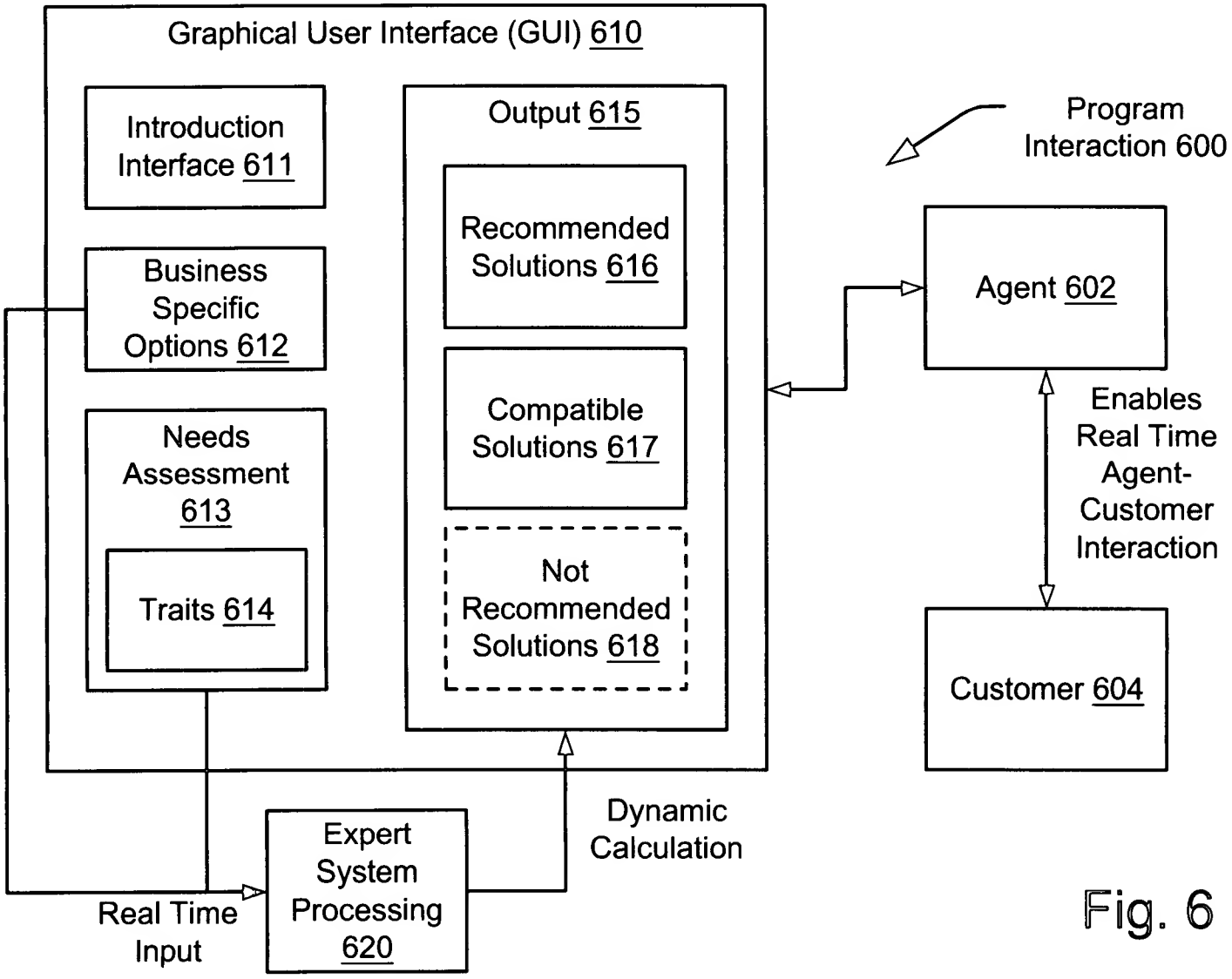

Fig. 6

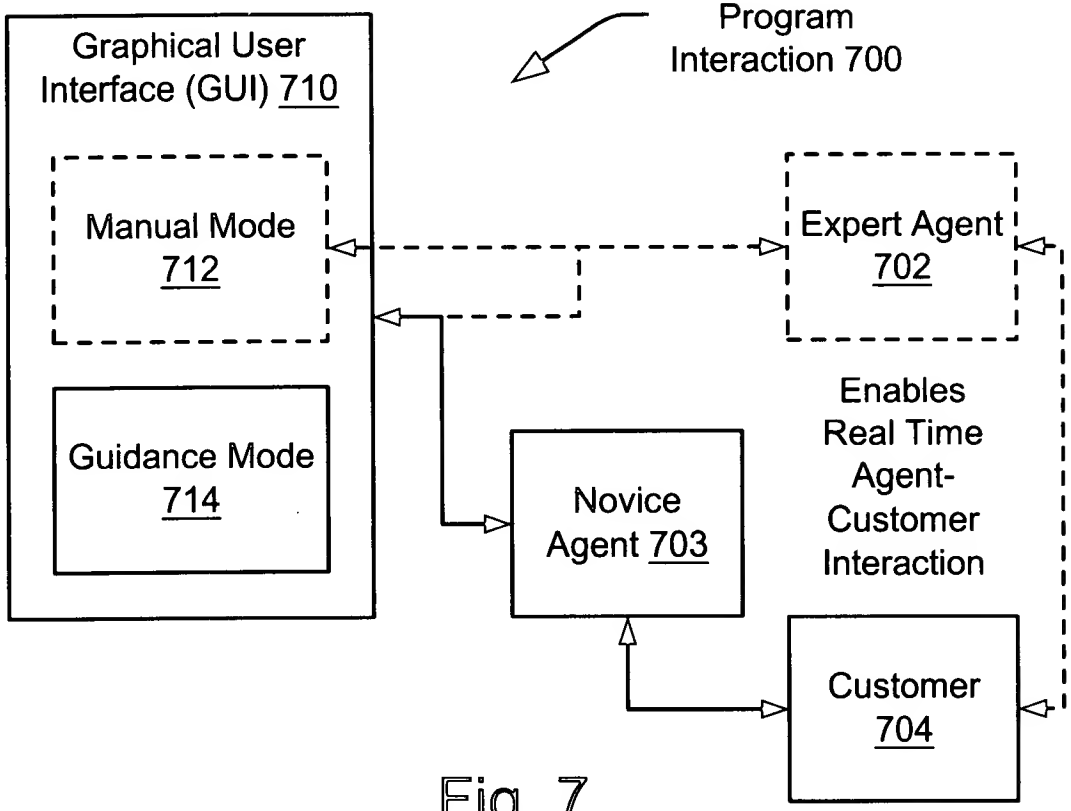
Graphical User Interface (GUI) 710
Program Interaction 700
Manual Mode 712
Guidance Mode 714
Expert Agent 702
Enables Real Time Agent-Customer Interaction
Novice Agent 703
Customer 704

Fig. 7

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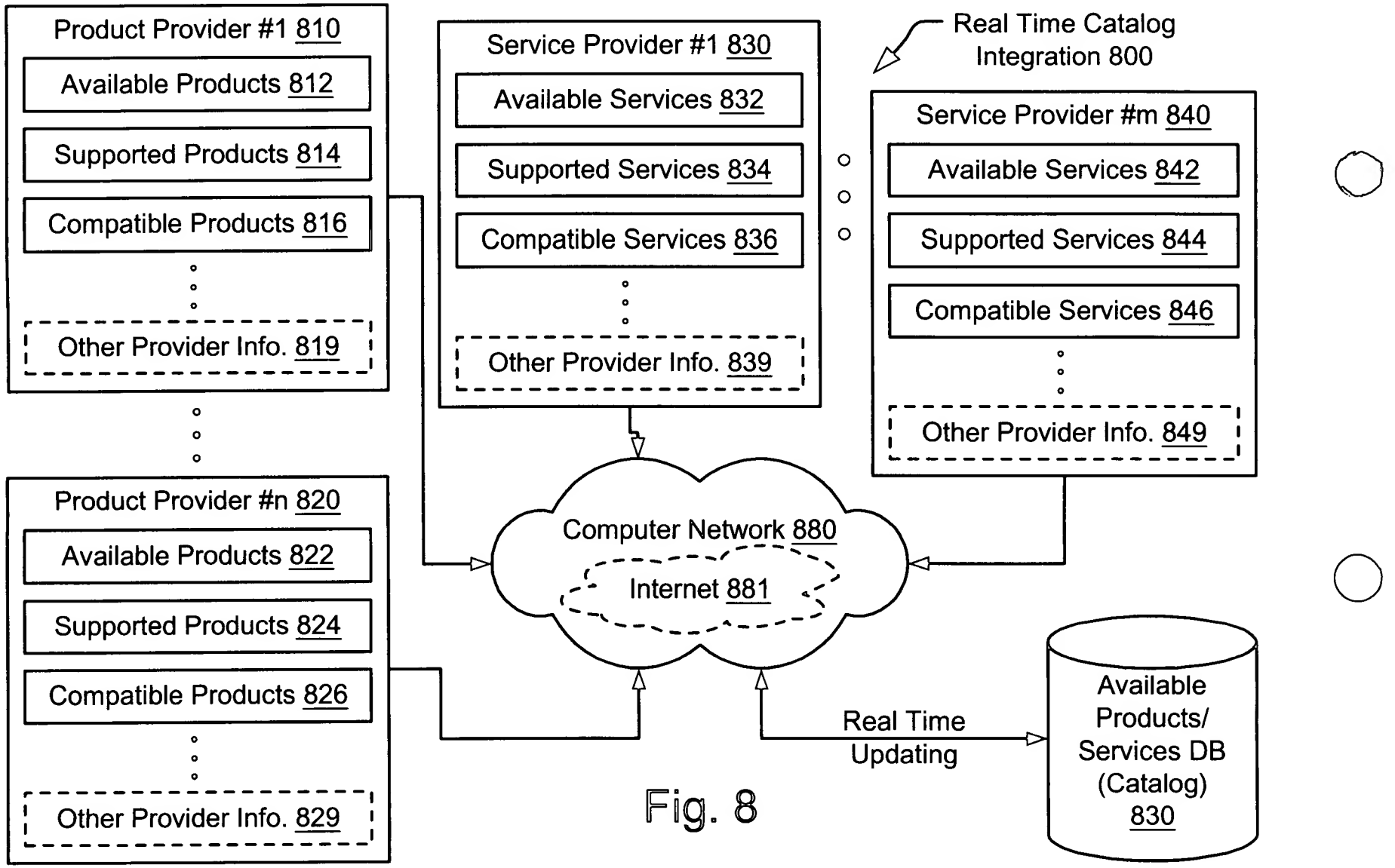

Fig. 8

T06T20" Th260660

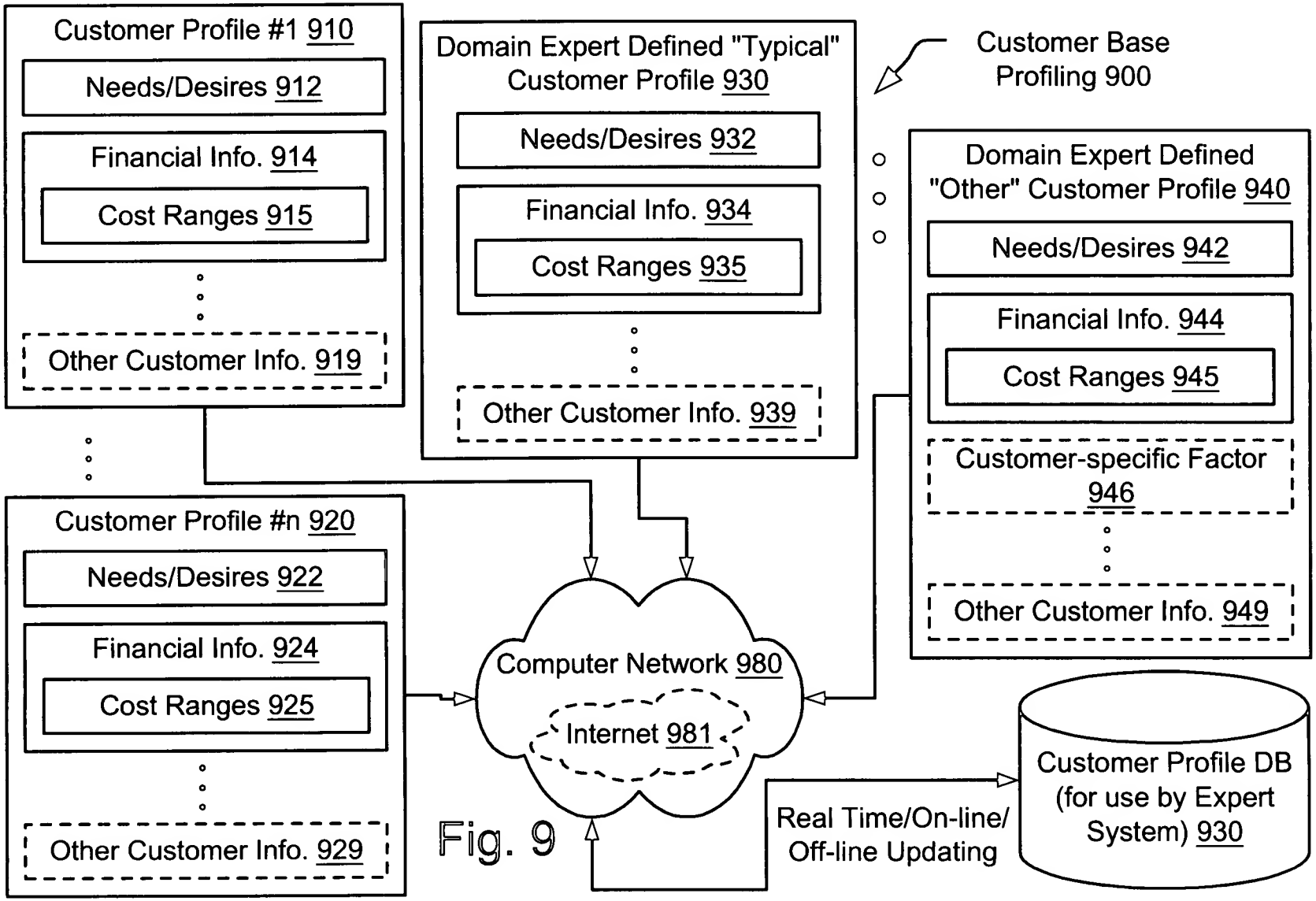

Fig. 9

EP06720 EP1760660

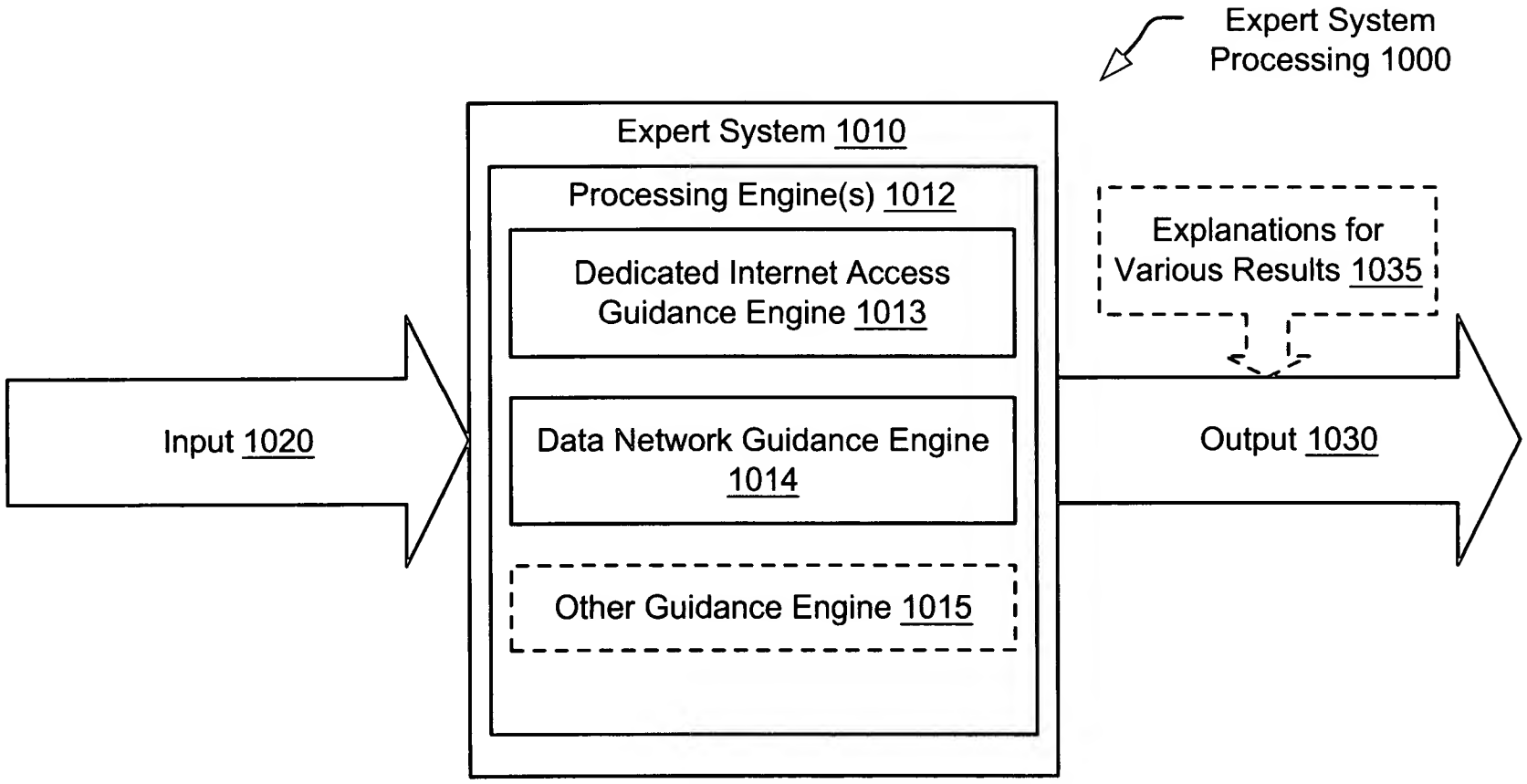

Fig. 10

T067Z0" Th26060

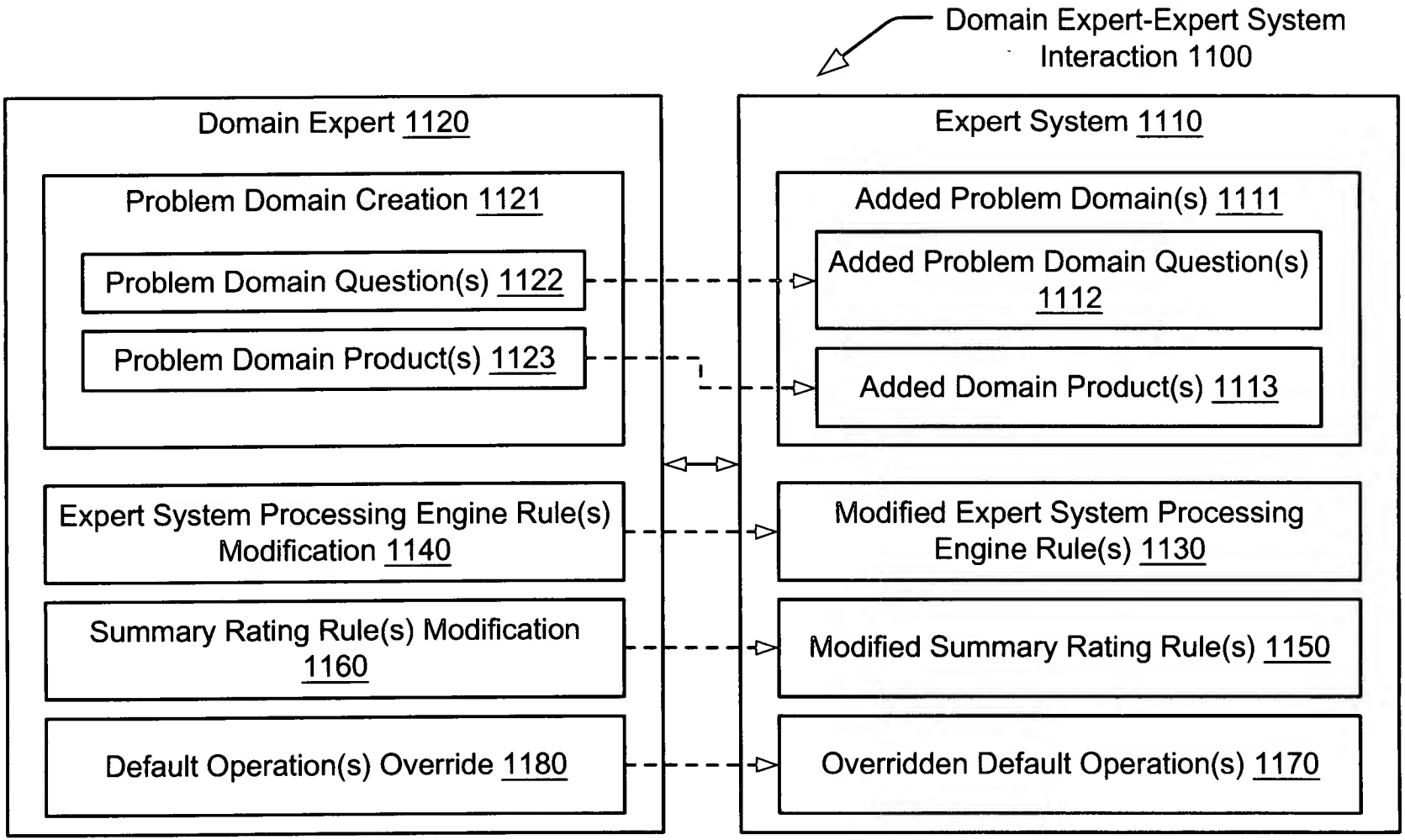

Fig. 11

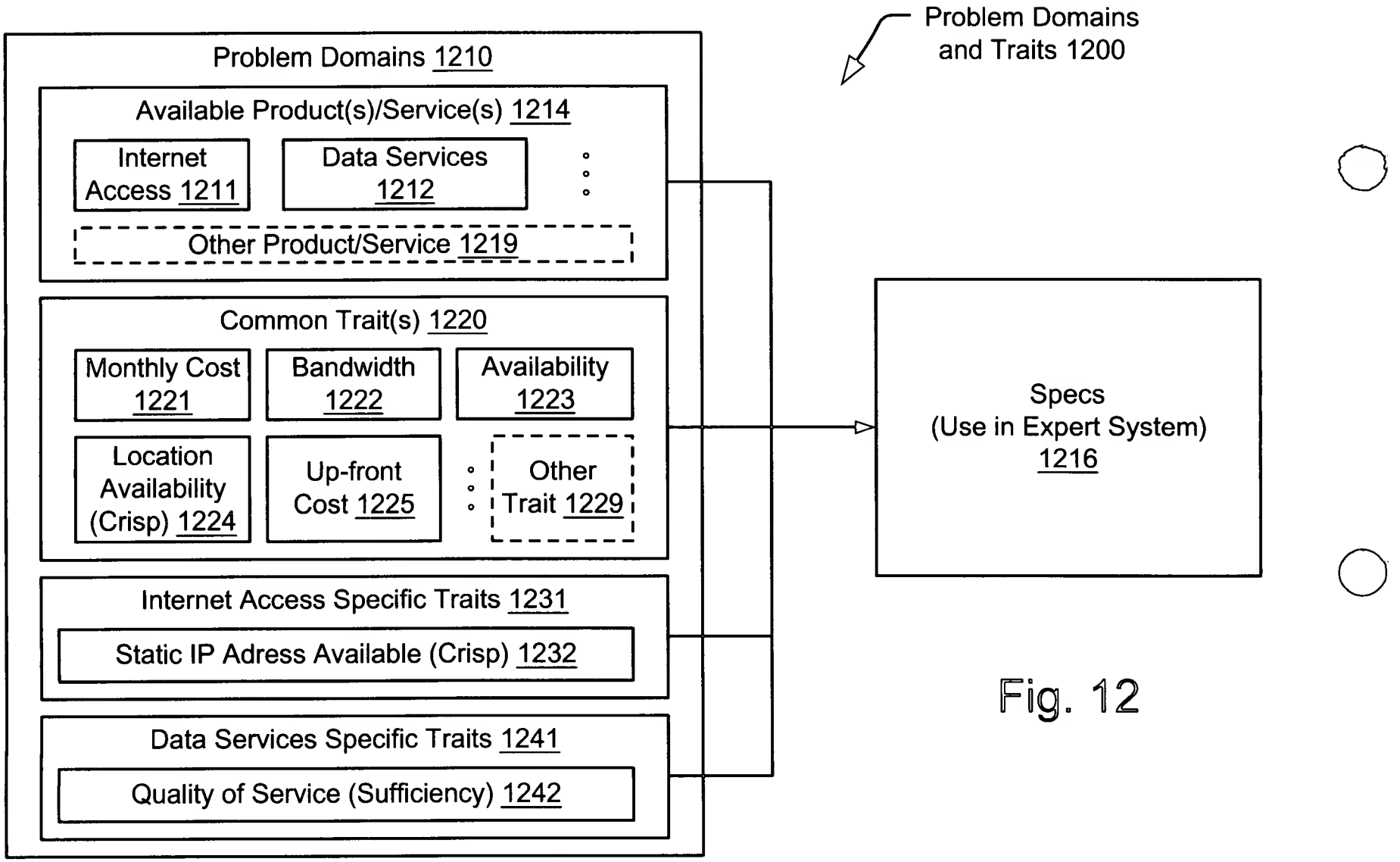
Problem Domains and Traits 1200
Problem Domains 1210
Available Product(s)/Service(s) 1214
Internet Access 1211
Data Services 1212
Other Product/Service 1219
Common Trait(s) 1220
Monthly Cost 1221
Bandwidth 1222
Availability 1223
Location Availability (Crisp) 1224
Up-front Cost 1225
Other Trait 1229
Internet Access Specific Traits 1231
Static IP Adress Available (Crisp) 1232
Data Services Specific Traits 1241
Quality of Service (Sufficiency) 1242
Specs (Use in Expert System) 1216

Fig. 12

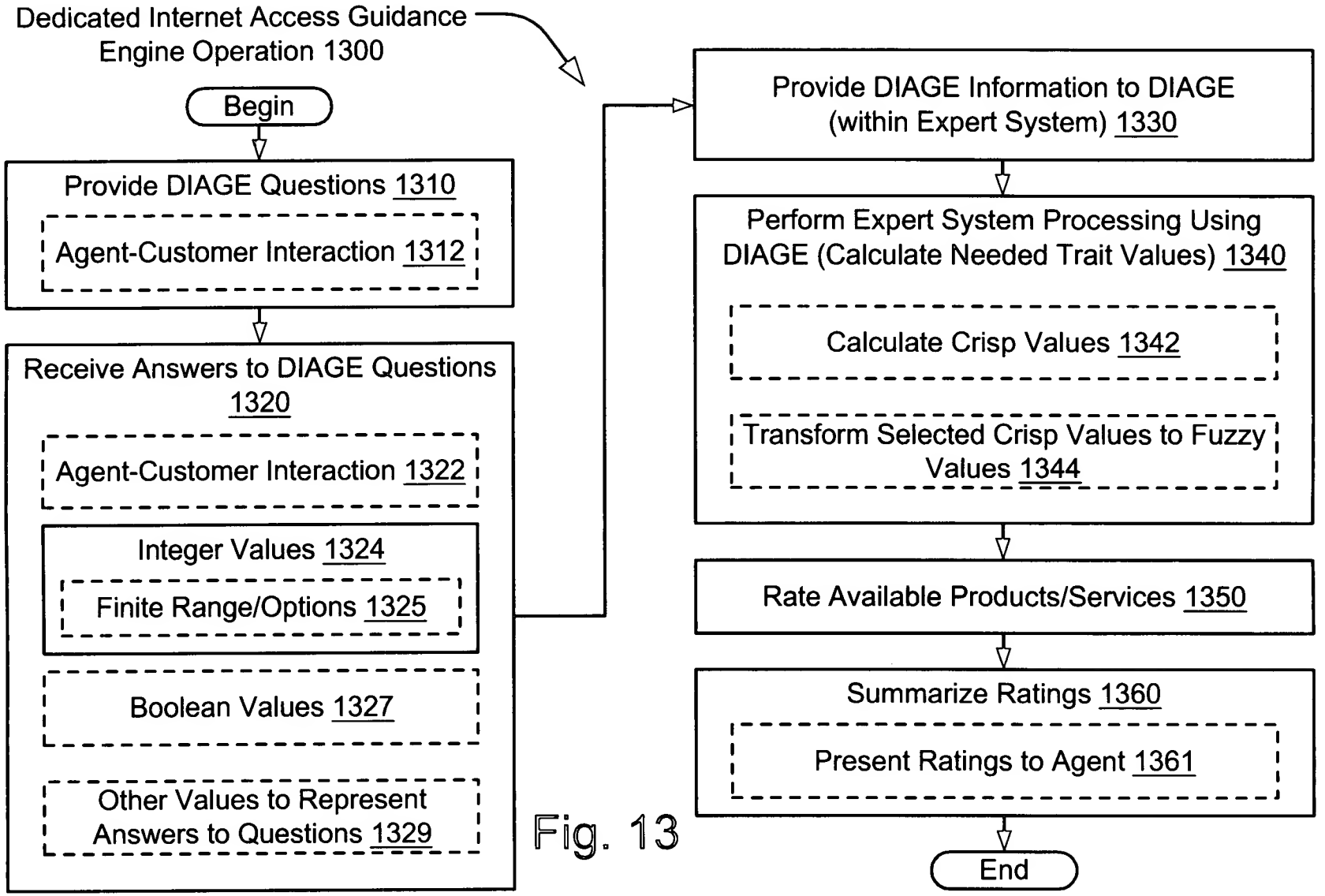
Dedicated Internet Access Guidance Engine Operation 1300
Begin
Provide DIAGE Questions 1310
Agent-Customer Interaction 1312
Receive Answers to DIAGE Questions 1320
Agent-Customer Interaction 1322
Integer Values 1324
Finite Range/Options 1325
Boolean Values 1327
Other Values to Represent Answers to Questions 1329
Provide DIAGE Information to DIAGE (within Expert System) 1330
Perform Expert System Processing Using DIAGE (Calculate Needed Trait Values) 1340
Calculate Crisp Values 1342
Transform Selected Crisp Values to Fuzzy Values 1344
Rate Available Products/Services 1350
Summarize Ratings 1360
Present Ratings to Agent 1361
End

Fig. 13

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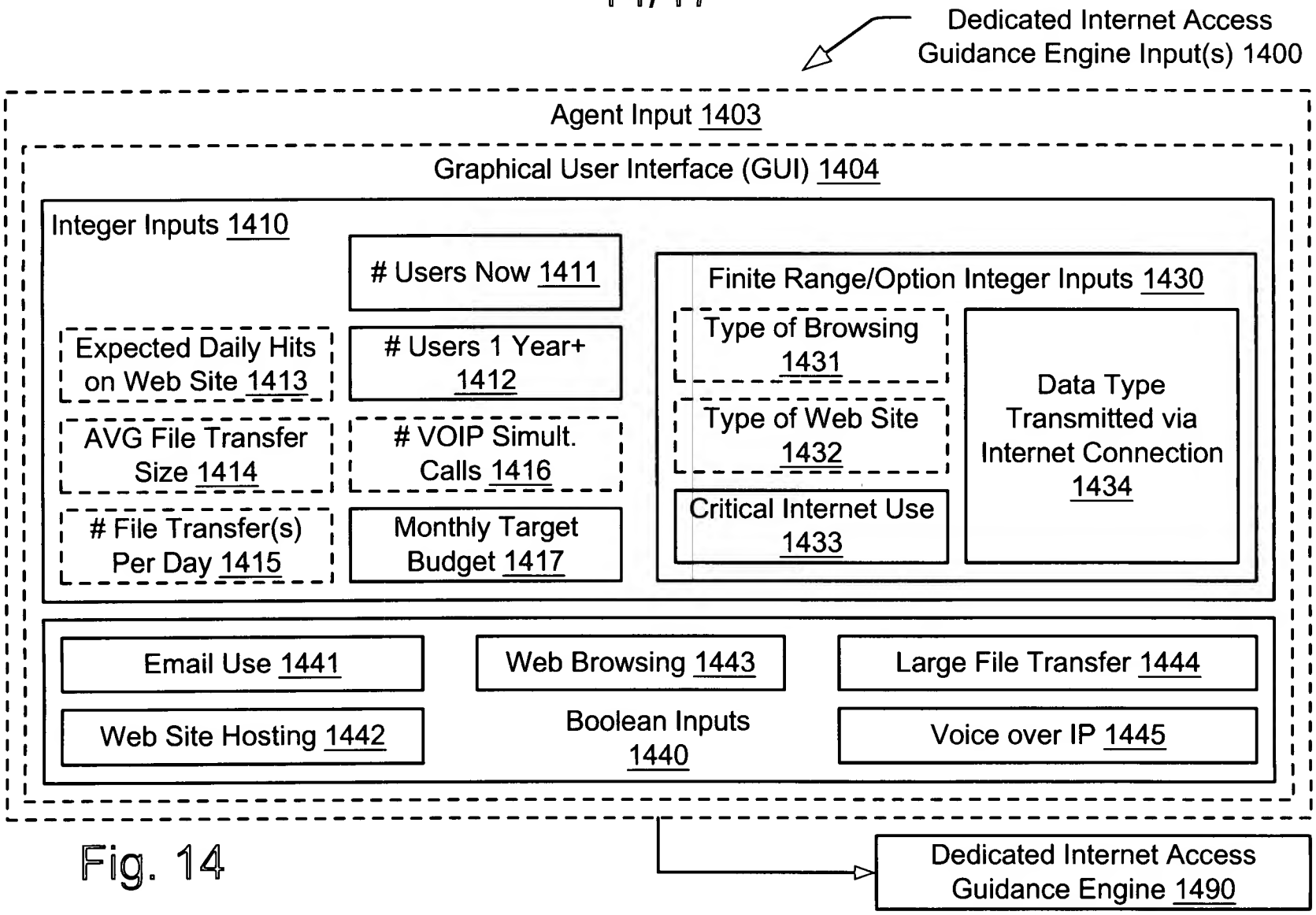

Fig. 14

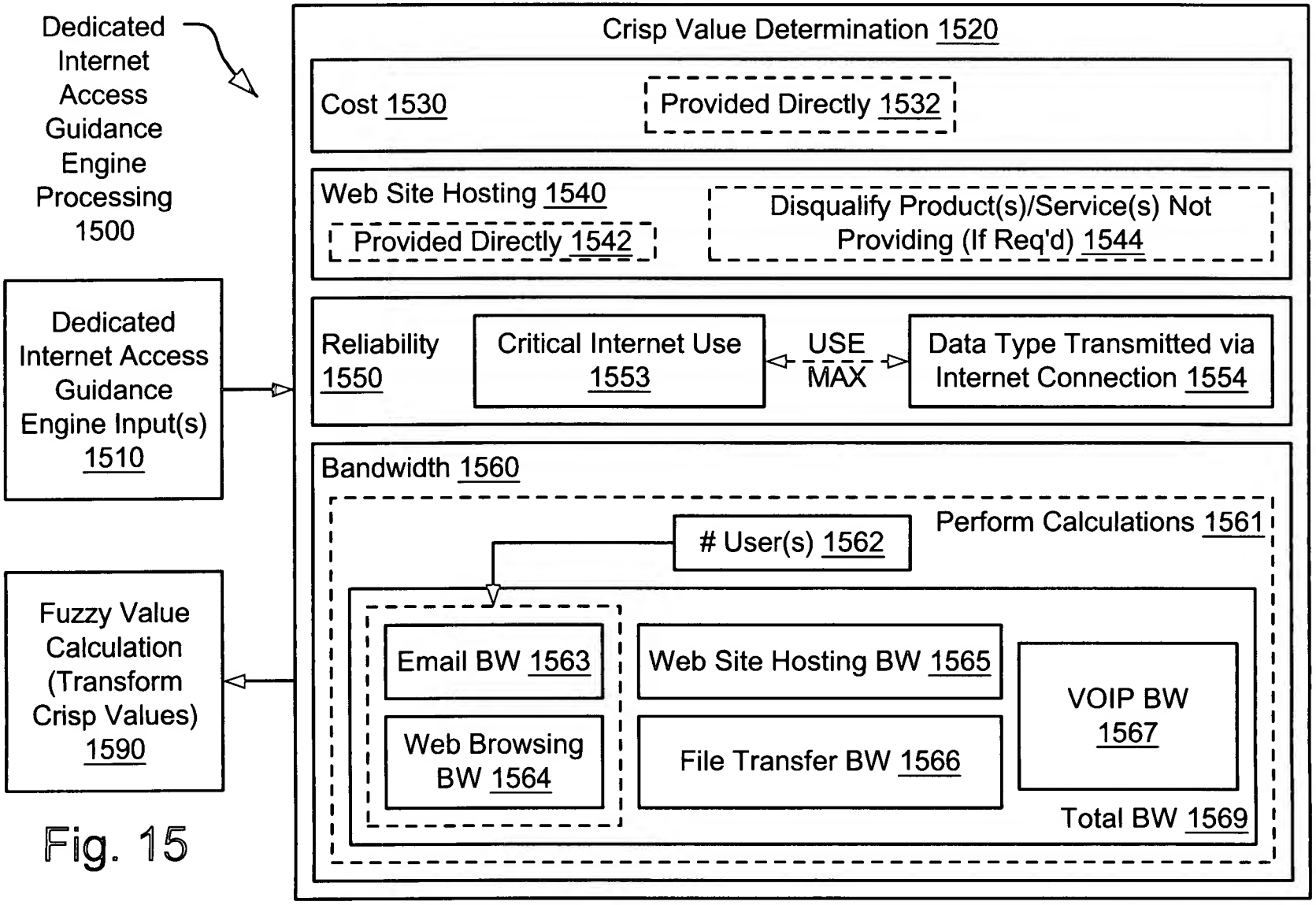
Dedicated Internet Access Guidance Engine Processing 1500
Dedicated Internet Access Guidance Engine Input(s) 1510
Fuzzy Value Calculation (Transform Crisp Values) 1590
Crisp Value Determination 1520
Cost 1530
Provided Directly 1532
Web Site Hosting 1540
Provided Directly 1542
Disqualify Product(s)/Service(s) Not Providing (If Req'd) 1544
Reliability 1550
Critical Internet Use 1553
USE MAX
Data Type Transmitted via Internet Connection 1554
Bandwidth 1560
Perform Calculations 1561
User(s) 1562
Email BW 1563
Web Browsing BW 1564
Web Site Hosting BW 1565
File Transfer BW 1566
VOIP BW 1567
Total BW 1569

Fig. 15

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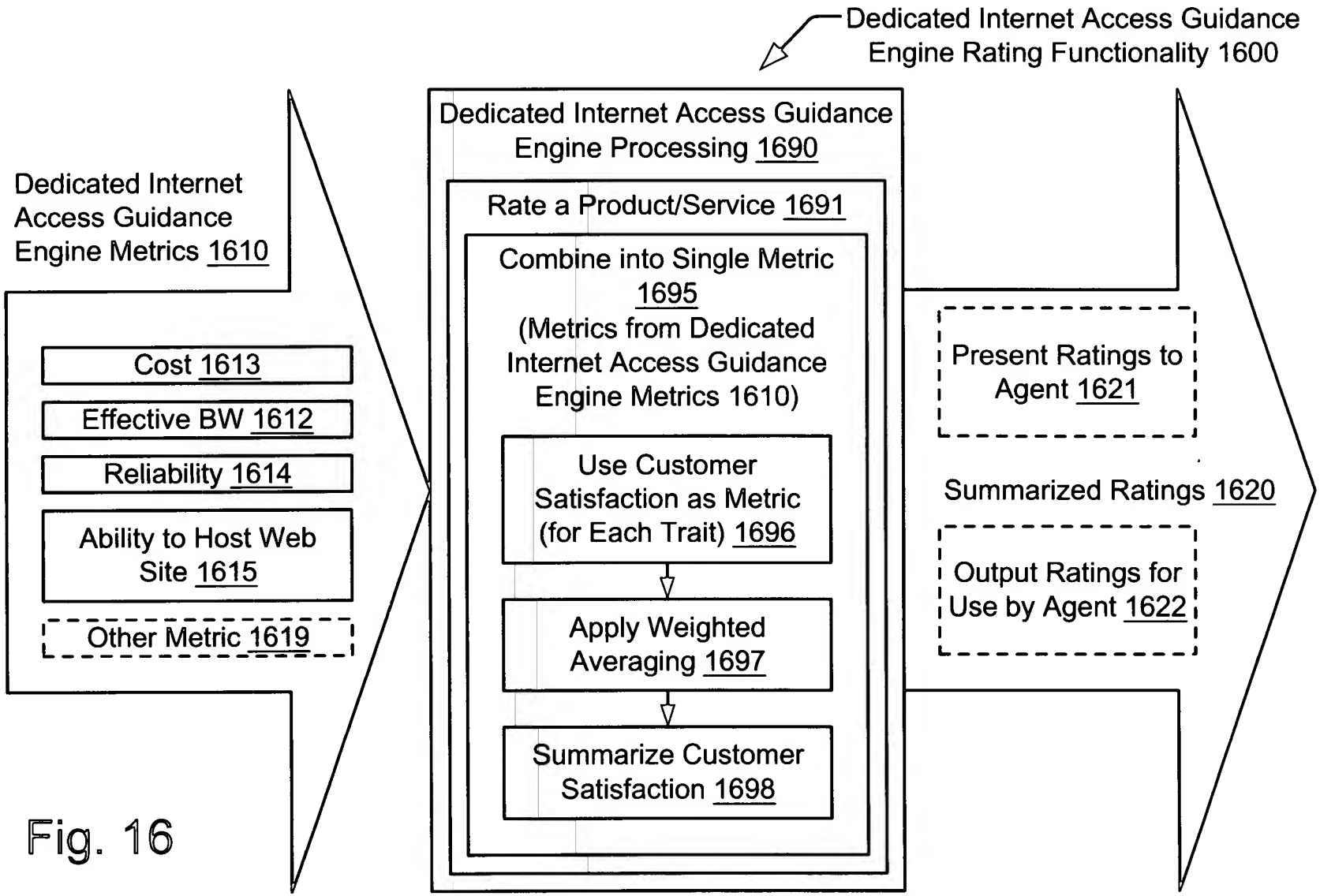

Fig. 16

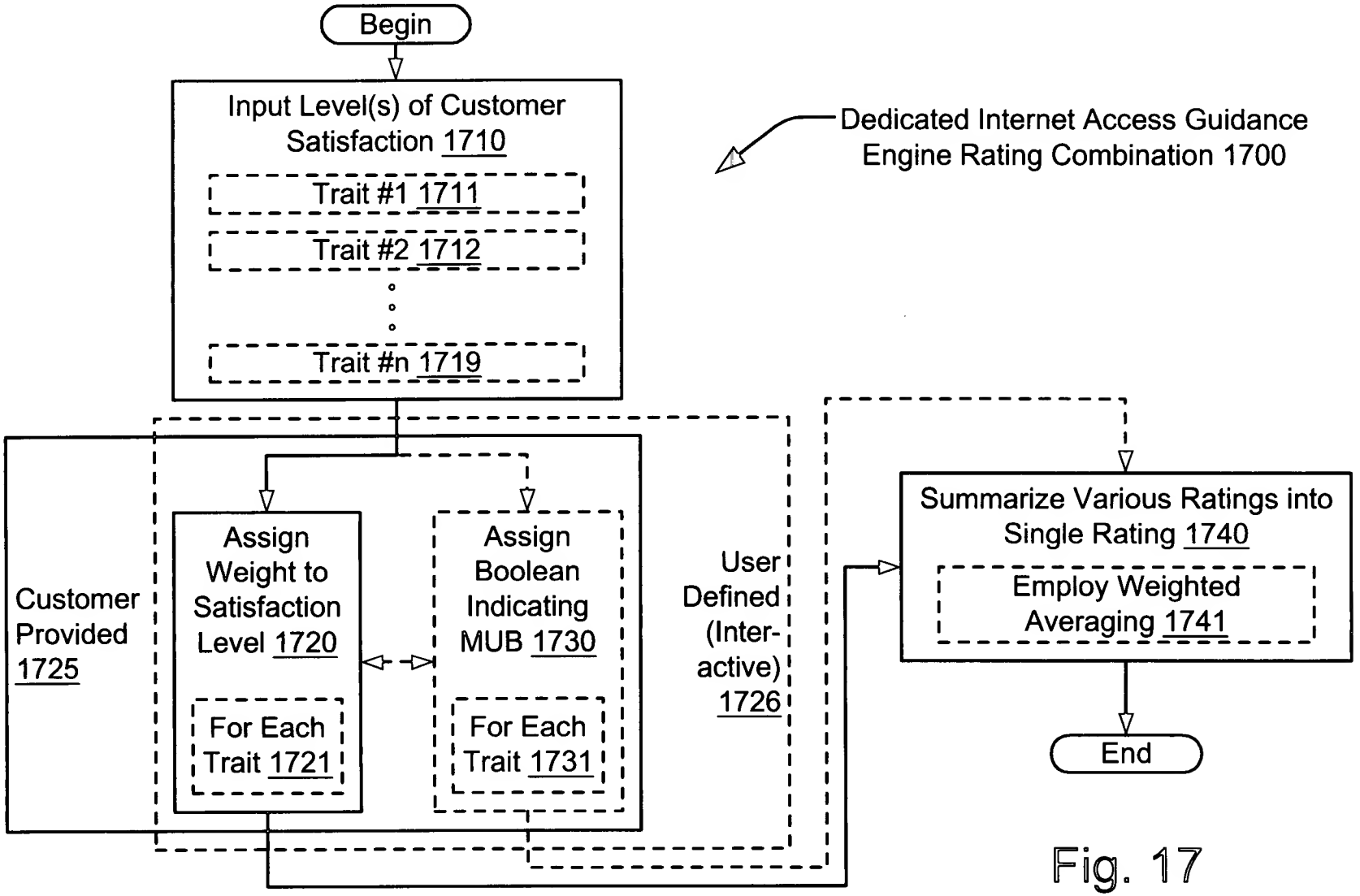
Begin
Input Level(s) of Customer Satisfaction 1710
Trait #1 1711
Trait #2 1712
Trait #n 1719
Dedicated Internet Access Guidance Engine Rating Combination 1700
Customer Provided 1725
Assign Weight to Satisfaction Level 1720
For Each Trait 1721
Assign Boolean Indicating MUB 1730
For Each Trait 1731
User Defined (Inter-active) 1726
Summarize Various Ratings into Single Rating 1740
Employ Weighted Averaging 1741
End

Fig. 17